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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,585	10/07/2003	Jarmo Lchtonen	944-003.192	6853
4955 7590 03/30/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER SHIH, HAOSHIAN	
			ART UNIT 2173	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS		MAIL DATE 03/30/2007	DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/681,585

Applicant(s)

LEHTONEN, JARMO

Examiner

Haoshian Shih

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The office action is in response to the applicant amendment filed on 02/22/2007
2. Claim 1-20 are pending in this application and have been examined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inukai (US 2001/0015720 A1) in view of Oueslati et al. (Oueslati, US 6,806,865 B2).**

5. As to **INDEPENDENT** claim 1, Inukai discloses an apparatus for use in providing user inputs to a communication or computing device, comprising: an input button (Fig 8, "1") for receiving a force exerted on the input button via the indicator instrument (Fig 8, #22; [0036], lines 4 – 6; "stick member" is the indicator instrument); and means disposed proximate to the receptacle for detecting the force exerted on the input button based on the input button moving or deforming in response to the force ([0035], lines 1 - 5) and for providing a signal corresponding to the force ([0035], lines 1 - 5). Inukai does not disclose an input button provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed

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surface and having a cavity or receptacle formed on the exposed surface for receiving an end portion of an indicator instrument unattached to the input button.

Oueslati discloses an input button provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed surface and having a cavity or receptacle formed on the exposed surface for receiving an end portion of an indicator instrument unattached to the input button (fig.2; fig 5; fig 3, "125", "128", "230").

It would have been obvious to one of ordinary skill in the art, having the teaching of Inukai *and* Oueslati before him at the time the invention was made, to modify the input detection taught by Inukai *to* include a detachable input device taught by Oueslati with the motivation being to provide portability of handheld devices (col.1, lines 34-39).

6. As to **INDEPENDENT** claim 11, Inukai discloses a method for acquiring user inputs to a communication or computing device, comprising: receptacle of an input button lying in or on a surface of the communication or computing device receiving an end portion of an indicator instrument (Fig 8, #22; [0036], line 12 - 15); and the input button moving or deforming in response to a force or a force couple exerted on the input button via the end portion of the indicator instrument ([0058], line 4 - 6). Inukai does not disclose an input button provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed

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surface and having a cavity or receptacle formed on the exposed surface for receiving an end portion of an indicator instrument unattached to the input button.

Oueslati discloses an input button provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed surface and having a cavity or receptacle formed on the exposed surface for receiving an end portion of an indicator instrument unattached to the input button (fig.2; fig 5; fig 3, "125", "128", "230").

It would have been obvious to one of ordinary skill in the art, having the teaching of Inukai *and* Oueslati before him at the time the invention was made, to modify the input detection taught by Inukai *to* include a detachable input device taught by Oueslati with the motivation being to provide portability of handheld devices (col.1, lines 34-39).

7. As to **INDEPENDENT** claim 19, Inukai discloses an apparatus for use in providing user inputs to a communication or computing device, comprising: an input button for receiving a force exerted on the input button via the indicator instrument (Fig 8, #22; [0036], line 12 - 15); and a sensor array disposed proximate to the receptacle for detecting the force exerted on the input button based on the input button moving or deforming in response to the force ([0038], line 25 - 27), and for providing a signal corresponding to the force ([0035], line 1 - 5). Inukai does not disclose an input button

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provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed surface for receiving an end portion of an indicator instrument unattached to the input button.

Oueslati discloses an input button provided as a flattened shape lying in or on and nearly flush with a surface of the communication or computing device so as to have an exposed surface and having a cavity or receptacle formed on the exposed surface for receiving an end portion of an indicator instrument unattached to the input button (fig.2; fig 5; fig 3, "125", "128", "230").

It would have been obvious to one of ordinary skill in the art, having the teaching of Inukai *and* Oueslati before him at the time the invention was made, to modify the input detection taught by Inukai *to* include a detachable input device taught by Oueslati with the motivation being to provide portability of handheld devices (col.1, lines 34-39).

8. As to claim 2, Inukai discloses an apparatus wherein the means for detecting the force exerted on the input button comprises a strain sensor ([0038], line 25 - 27).

9. As to claim 3, Inukai discloses an apparatus wherein the means for detecting the force exerted on the input button comprises a sensor that transmits a signal corresponding to the force at least in respect to the direction of the force ([0060], line 6 - 10).

10. As to claim 4, Inukai discloses an apparatus, wherein the means for detecting the force exerted on the input button comprises a sensor that transmits a signal corresponding to the force at least in respect to the magnitude of the force ([0060], line 6 - 10).

11. As to claim 5, Inukai discloses an apparatus; wherein the means for detecting the force exerted on the input button comprises a sensor that transmits a signal until the force is removed ([0057], line 1-5; [0060], line 6 - 10).

12. As to claim 6, Inukai discloses an apparatus, where in the input button moves or deforms as to communicate to the means for detecting the force exerted on the input button corresponding to a user action ([0058], [0060]) selected from the set consisting of clicking, scrolling, selecting, pointing, cursor positioning, key pressing or typing, and joystick manipulating ([0050], last two lines; "click").

13. As to claim 7, Inukai discloses an apparatus, wherein the input button moves or deforms so as to communicate a force lying along the surface of the communication or computing device ([0058]).

14. As to claim 8, Inukai discloses an apparatus wherein the input button moves or deforms ([0058]) so as to communicate directed orthogonally to the surface of the

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communication or computing device (fig.1, [0050], last two lines; the pointing stick is positioned orthogonally to the surface, and a clicking input that happens on the Z-plan of the screen can be communicated).

15. As to claim 9, Oueslati discloses the input button is so shaped as to allow imparting a force couple via the indicator instrument (col.4, lines 30-37; the input button may be utilized to receive a variety of elongated elements) and so tending to cause a change in pitch of the input button relative to the surface of the communication or computing device, and where in the input button moves or deforms as to communicate the force couple (fig.5; fig.6; col.3, lines 40-43; the input button may be configured to communicate a 360 degrees rotational motion).

16. As to claim 10, Inukai discloses the input button and means for detecting the force exerted on the input button are in combination provided as a box-in-box construction including an outer box and an inner box, the outer box having sensing means responsive to forces applied to the inner box via the end portion of the indicator instrument for providing a corresponding signal indicating a user input (fig.8, "3", "8a"- "8d", "22"); [0038], lines 25-27; the surface area 3 with sensors "8a"- "8d" provides the construction of the outer box, and the insertion point "22"). Inukai does not disclose the inner box provided as the flattened shape having the indentation formed on the exposed surface.

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In the same field of endeavor, Oueslati discloses the inner box provided as the flattened shape having the indentation formed on the exposed surface (fig.3, "125", "128", "230"; fig.5, "125", "128", "230").

17. As to claim 12, Inukai discloses a method, wherein the moving or deforming of the input button is a sliding motion ([0058], line 3-5; the deformation of the cross area 7 represents a sliding motion).

18. As to claim 13, Oueslati discloses the moving or deforming of the input button is a rocking motion caused by applying a force couple to the input button via the indicator instrument (col.3, lines 30-32; left and right movement).

19. As to claim 14, Inukai discloses a method of moving or deforming of the input button; the moving or deforming of the input button is a motion into or out of the surface of the communication or computing device ([0056], line 7-10).

20. As to claim 15, Inukai discloses a method, wherein the moving or deforming of the input button is a motion substantially in the plane of the surface of the communication or computing device ([0056], line 7 – 10).

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21. As to claim 16, Inukai discloses a method, wherein the indicator instrument is used to provide user inputs that would otherwise be provided using a keyboard ([0004], line 3 –5).

22. As to claim 17, Oueslati discloses the inner box is so shaped as to allow imparting a force couple (fig.5) via the indicator instrument (col.4, lines 30-37; the input button may be utilized to receive a variety of elongated elements) and so tending to cause a change in pitch of the input button relative to the surface of the communication or computing device, and wherein the sensing means are for providing a signal indicative of the force couple (fig.5; fig.6; col.3, lines 40-43; the input button may be configured to communicate a 360 degrees rotational motion).

23. As to claim 20, discloses the sensor array comprises a plurality of strain sensors ([0038], lines 25-27).

24. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inukai in view of Oueslati, in further view of Hyun et al. (Hyun, US 2003/0125094 A1).

25. As to claim 18, Inukai and Oueslati does not disclose the indicator instrument and an indicator holder for storing the indicator when the indicator is not in use, wherein the indicator holder is attached to the side of the communication or computing device or

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integrated into a cover for the communication or computing device, and is shaped so as to allow snapping to a holding position when the indicator is pressed onto the holder.

In the same field of endeavor, Hyun discloses the indicator instrument and an indicator holder for storing the indicator when the indicator is not in use, wherein the indicator holder is attached to the side of the communication or computing device or integrated into a cover for the communication or computing device, and is shaped so as to allow snapping to a holding position when the indicator is pressed onto the holder (fig.6, "102", "30"; [0033]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Inukai and Queslati and the teachings of Hyun in order to provide a way to store the indicator when the indicator is not in use.

RESPOND TO ARGUMENT

26. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 1.111(c) to consider these references fully when responding to this action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haoshian Shih whose telephone number is (571) 270-1257. The examiner can normally be reached on m-f 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HSS


TADESSE HAILU
Patent Examiner